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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,964	03/23/2004	Steven J. Ponessa	END920030156US1	2341
30449 7590 07/16/2007 SCHMEISER, OLSEN & WATTS 22 CENTURY HILL DRIVE SUITE 302 LATHAM, NY 12110			EXAMINER SANDERS, AARON J	
			ART UNIT 2168	PAPER NUMBER
			MAIL DATE 07/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,964	Applicant(s) PONESSA, STEVEN J.	
	Examiner Aaron Sanders	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,9-11,14-17,19-21,24-27 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,9-11,14-17,19-21,24-27 and 29-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 May 2007 has been entered. Claims 1, 4-7, 9-11, 14-17, 19-21, 24-27, and 29-36 are pending.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the methods of claims 1 and 21 must be shown or the features canceled from the claims. No new matter should be entered.

Figs. 5-9B and 11 are objected to because code segments are not suitable as drawings of the invention. If Applicant wishes to include code segments, they should be incorporated into the body of the specification as a table or attached as an appendix.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested:
Generating an Information Catalog for a Business Model.

Claim Objections

As per claims 1, 11, and 21, the phrase "the business metadata and to form a source tree" in the limitation "wherein prior to the applying step" appears to be incorrect. It appears that the "and" should be deleted.

Claim Rejections - 35 USC § 112 Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 31, the phrase “adapted to” is indefinite because it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 31-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Prompt et al., U.S. 2001/0034733.

As per claims 31-36, Prompt et al. teach:

31. A graphical interface of a computer system, comprising a package list frame, an object list frame driven by the package list frame, and a detail frame driven by the object list frame,

said computer system comprising a processor and a computer readable memory unit coupled to the processor (See e.g. Fig. 4 where, see [0132], “FIG. 4 shows a block diagram of a second embodiment 100b of communication system 100a, namely having more details for the hierarchical computing system 102b, the hierarchical/relational translation system 104b, and the relational computing system 106b”);

said memory unit including an information catalog compiler that when executed by the processor implements a method for generating an information catalog relating to a business model (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”);

said graphical interface adapted to being navigated by an end user of the method (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”);

said method comprising generating the information catalog by applying presentation metadata to technical metadata and business metadata such that the information catalog comprises the technical metadata and the business metadata in accordance with a presentation format specified by the presentation metadata (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”);

said technical metadata being associated with data used by computer applications supporting business processes of the business model (See e.g. Fig. 4 where, see [0163], “the data source is a relational database 106b which forms the authoritative source of directory information to be viewed with the VDS 408”);

said package list frame comprising means for selecting applications of said computer applications and associated table creators of tables relating to the technical metadata (See e.g.

Fig. 23A where, see [0195], “the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”);

said object list frame comprising means for selecting tables driven by a computer application and associated table creator selected from the package list frame (See e.g. Fig. 23A where, see [0195], “Upon selecting the flat directory view type 2202 from the DVX generator 2200, all of the tables 2310 that are selected are shown in the user interface 2300 of FIG. 23A”);

said detail frame comprising means for displaying table information relating to a table selected from the object list frame (See e.g. Fig. 23A where, see [0195], “a user interface 2301 to display a DIT 2302 and a corresponding flat default view 2303 corresponding to a DN for the information displayed 2304 using the third module 1056”).

32. The graphical interface of claim 31, wherein the table information is an overview of the business model (See e.g. Fig. 23A where, see [0195], “the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”).

33. The graphical interface of claim 32, wherein the overview includes processes of the business processes (See e.g. Fig. 23A and [0125], “The relationship between tables in a relational database system enumerate the business processes acting upon the corporate data and together build an interrelated sequence of hierarchical connections. These hierarchical connections represent how the work of the business is done”).

34. The graphical interface of claim 32, wherein the overview includes applications of the computer applications (See e.g. Fig. 23A and [0125], “The relationship between tables in a relational database system enumerate the business processes acting upon the corporate data and

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together build an interrelated sequence of hierarchical connections. These hierarchical connections represent how the work of the business is done”).

35. The graphical interface of claim 31, wherein the package list frame, object list frame, and a detail frame are generated by execution of files of the information catalog (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”).

36. The graphical interface of claim 35, wherein the files are selected from the group consisting of Hypertext Markup Language (HTML) files, PDF files, ZIP files, and combinations thereof (See e.g. Fig. 17 where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-7, 9-11, 14-17, 19-21, 24-27, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prompt et al., U.S. 2001/0034733, in view of Fry, U.S. 2003/0159111.

1. A method for generating an information catalog relating to a business model, comprising the steps of:

accessing technical metadata from a data warehouse, said technical metadata being associated with data used by computer applications, said computer applications supporting business processes of the business model (See e.g. Fig. 4 where, see [0163], “the data source is a relational database 106b which forms the authoritative source of directory information to be viewed with the VDS 408”);

accessing business metadata from a first source outside of the data warehouse, said business metadata comprising relationships between the business processes and the computer applications, said business metadata further comprising relationships between the computer applications and the technical metadata (See e.g. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format. The fifth module 1064 maps the entities described by the module 1062 into the hierarchical object classes and attributes, which in one embodiment can be for LDAP”);

accessing presentation metadata from a second source outside of the data warehouse, said second source being independent of the first source, said presentation metadata specifying a presentation format of the technical metadata and business metadata, wherein the second source comprises at least one eXtensible Stylesheet Language (XSL) stylesheet comprising the

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presentation metadata (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure” and Fig. 17 where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”);

applying the presentation metadata to the technical metadata and the business metadata to generate the information catalog, said information catalog comprising the technical metadata and the business metadata in accordance with the presentation format specified by the presentation metadata (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”); and

displaying, on an output device for an end user, a graphical interface representing the generated information catalog (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”),

wherein the method further comprises generating a rules base of rules as templates derived from the presentation metadata in the at least one XSL stylesheet (See e.g. [0232], “In addition to describing how to plan and map meaningful views with LDAP rules... with respect to the second module 1060” and [0261], “In doing so, the second module 1060 performs various

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sub-processes the functions of which include, but are not limited to: (1) defining and managing hierarchical paths and views derived from the ORG object... and (3) defining an HTML presentation template for run-time display of information on the client computer 402” where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”);

wherein prior to the applying step the method further comprises parsing the technical metadata and the business metadata and to form a source tree such that the source tree comprises the parsed business metadata and parsed technical metadata logically linked to each other (See e.g. [0085], “the present invention can operate with an information system that locates, extracts and transforms data from a variety of unrelated relational network data sources into a hierarchical network data model through the dynamic reconfiguration of the Directory Information Tree (DIT) and contents”);

wherein the applying step comprises both applying the templates of the rules base and traversing the source tree to form a result tree that includes the logically linked technical metadata and business metadata integrated with the presentation metadata (See e.g. Fig. 34A where, see [0252], “The Presentation tab 3410 includes the template for the information that will be published by the directory view” and Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”);

wherein the method further comprises transforming the result tree into the information catalog such that the information catalog comprises files formatted in accordance with the presentation metadata (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”);

wherein traversing the source tree comprises traversing the entire source tree in accordance with a recursive descent algorithm in which said traversing comprises starting at the root node of the source tree and traversing through the source tree until a leaf node is reached and, then returning through the source tree to the root node (See e.g. [0014], “recursive inquiries are required to accommodate the disparate syntax and semantics used by various database providers. The recursive inquiries involve re-synchronizing information existing in unrelated data sources on an ongoing basis due to the incompatibilities introduced by the disparate data models of each data source”);

wherein said traversing the source tree comprises ascertaining whether there is a rule in the rules base for each element in the source tree (Prompt et al. do not teach “ascertaining whether there is a rule in the rules base for each element in the source tree”. However, Fry does, see [0010], “A stylesheet contains a set of template rules, with each template rule having two parts. One part is a pattern that is matched against nodes in the source tree, and the other part is a template that can be instantiated to form part of the result tree”. Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry’s teachings would have allowed Prompt’s et al. method and system to gain a simple application of a rules base to a hierarchical display because,

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e.g., “it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user”, see Lamkin et al., U.S. 2004/0220926, paragraph [0163]);

wherein each element having exactly one rule in the rules base, as determined from said ascertaining, is written out in accordance with said exactly one rule during said displaying (Prompt et al. do not teach displaying elements with one rule according to that rule. However, Fry does, see [0011], “In the process of finding the applicable template rule, more than one template rule can have a pattern that matches a given element. However, only one template rule can be applied”. Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry’s teachings would have allowed Prompt’s et al. method and system to gain a simple application of a rules base to a hierarchical display because, e.g., “it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user”, see Lamkin et al., U.S. 2004/0220926, paragraph [0163]);

wherein each element having no rule in the rules base as determined from said ascertaining, is written out as text during said displaying (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”); and

wherein for each element having more than one rule in the rules base, as determined from said ascertaining, one or more of said more than one rule is applied to said each element in accordance with a rule hierarchical scheme for determining how said each element is displayed during said displaying (Prompt et al. do not teach displaying elements with multiple rules

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according to only one rule. However, Fry does, see [0011], “In the process of finding the applicable template rule, more than one template rule can have a pattern that matches a given element. However, only one template rule can be applied”. Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry’s teachings would have allowed Prompt’s et al. method and system to gain a simple application of a rules base to a hierarchical display because, e.g., “it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user”, see Lamkin et al., U.S. 2004/0220926, paragraph [0163]).

2-3. (Canceled)

4. The method of claim 1, wherein the graphical interface includes a package list frame, an object list frame driven by the package list frame, and a detail frame driven by the object list frame, wherein the package list frame includes selectable applications of said computer applications and selectable associated table creators of tables relating to the technical data, wherein the object list frame is adapted to include selectable tables driven by a computer application and associated table creator selected from the package list frame, and wherein the detail frame is adapted to include table information relating to a table selected from the object list frame (See e.g. Prompt et al. Figs. 23A-B where, see [0195], “the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302 and a corresponding flat default view 2303 corresponding to a DN for the information displayed 2304 using the third module 1056”).

5. The method of claim 1, wherein the information catalog comprises result files selected from the group consisting of Hypertext Markup Language (HTML) files, PDF files, ZIP files,

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and combinations thereof (See e.g. Prompt et al. Fig. 17 where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”).

6. The method of claim 1, wherein the first source comprises at least one eXtensible Markup Language (XML) file comprising the business metadata (See e.g. Prompt et al. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format”).

7. The method of claim 6, wherein the XML file includes well-formed HTML code (See e.g. Prompt et al. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format”).

8. (Canceled)

9. The method of claim 1, wherein the data warehouse is a relational database management system, and wherein the technical data is stored in tables of the relational database management system (See e.g. Prompt et al. Fig. 4 where, see [0132], “The embodiment of the system 100b also illustrates that the relational computing system 106b can be a relational database”).

10. The method of claim 1, said method further comprising accessing additional technical data from the first source; and wherein said applying step comprises applying the presentation metadata to the technical metadata, the business metadata, and the additional technical metadata

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to generate the information catalog (See e.g. Prompt et al. [0232], “Not only does the security parameters enable the addition and modification of user and group information, but also the importing of information from an existing LDAP server” and Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”).

11. A computer system comprising a processor and a computer readable memory unit coupled to the processor, said memory unit including an information catalog compiler that when executed by the processor implements a method for generating an information catalog relating to a business model, said method comprising the computer implemented steps of:

accessing technical metadata from a data warehouse, said technical metadata being associated with data used by computer applications, said computer applications supporting business processes of the business model (See e.g. Fig. 4 where, see [0163], “the data source is a relational database 106b which forms the authoritative source of directory information to be viewed with the VDS 408”);

accessing business metadata from a first source outside of the data warehouse, said business metadata comprising relationships between the business processes and the computer applications, said business metadata further comprising relationships between the computer applications and the technical metadata (See e.g. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format. The fifth module 1064

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maps the entities described by the module 1062 into the hierarchical object classes and attributes, which in one embodiment can be for LDAP”);

accessing presentation metadata from a second source outside of the data warehouse, said second source being independent of the first source, said presentation metadata specifying a presentation format of the technical metadata and business metadata, wherein the second source comprises at least one eXtensible Stylesheet Language (XSL) stylesheet comprising the presentation metadata (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure” and Fig. 17 where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”);

applying the presentation metadata to the technical metadata and the business metadata to generate the information catalog, said information catalog comprising the technical metadata and the business metadata in accordance with the presentation format specified by the presentation metadata (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”); and

displaying, on an output device for an end user, a graphical interface representing the generated information catalog (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to

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FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”),

wherein the method further comprises generating a rules base of rules as templates derived from the presentation metadata in the at least one XSL stylesheet (See e.g. [0232], “In addition to describing how to plan and map meaningful views with LDAP rules... with respect to the second module 1060” and [0261], “In doing so, the second module 1060 performs various sub-processes the functions of which include, but are not limited to: (1) defining and managing hierarchical paths and views derived from the ORG object... and (3) defining an HTML presentation template for run-time display of information on the client computer 402” where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”);

wherein prior to the applying step the method further comprises parsing the technical metadata and the business metadata and to form a source tree such that the source tree comprises the parsed business metadata and parsed technical metadata logically linked to each other (See e.g. [0085], “the present invention can operate with an information system that locates, extracts and transforms data from a variety of unrelated relational network data sources into a hierarchical network data model through the dynamic reconfiguration of the Directory Information Tree (DIT) and contents”);

wherein the applying step comprises both applying the templates of the rules base and traversing the source tree to form a result tree that includes the logically linked technical metadata and business metadata integrated with the presentation metadata (See e.g. Fig. 34A

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where, see [0252], “The Presentation tab 3410 includes the template for the information that will be published by the directory view” and Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”);

wherein the method further comprises transforming the result tree into the information catalog such that the information catalog comprises files formatted in accordance with the presentation metadata (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”);

wherein traversing the source tree comprises traversing the entire source tree in accordance with a recursive descent algorithm in which said traversing comprises starting at the root node of the source tree and traversing through the source tree until a leaf node is reached and then returning through the source tree to the root node (See e.g. [0014], “recursive inquiries are required to accommodate the disparate syntax and semantics used by various database providers. The recursive inquiries involve re-synchronizing information existing in unrelated data sources on an ongoing basis due to the incompatibilities introduced by the disparate data models of each data source”);

wherein said traversing the source tree comprises ascertaining whether there is a rule in the rules base for each element in the source tree (Prompt et al. do not teach “ascertaining whether there is a rule in the rules base for each element in the source tree”. However, Fry does, see [0010], “A stylesheet contains a set of template rules, with each template rule having two

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parts. One part is a pattern that is matched against nodes in the source tree, and the other part is a template that can be instantiated to form part of the result tree". Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry's teachings would have allowed Prompt's et al. method and system to gain a simple application of a rules base to a hierarchical display because, e.g., "it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user", see Lamkin et al., U.S. 2004/0220926, paragraph [0163]);

wherein each element having exactly one rule in the rules base, as determined from said ascertaining, is written out in accordance with said exactly one rule during said displaying; wherein each element having no rule in the rules base, as determined from said ascertaining, is written out as text during said displaying(Prompt et al. do not teach displaying elements with one rule according to that rule. However, Fry does, see [0011], "In the process of finding the applicable template rule, more than one template rule can have a pattern that matches a given element. However, only one template rule can be applied". Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry's teachings would have allowed Prompt's et al. method and system to gain a simple application of a rules base to a hierarchical display because, e.g., "it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user", see Lamkin et al., U.S. 2004/0220926, paragraph [0163]); and

wherein for each element having more than one rule in the rules base, as determined from said ascertaining, one or more of said more than one rule is applied to said each element in

accordance with a rule hierarchical scheme for determining how said each element is displayed during said displaying (Prompt et al. do not teach displaying elements with multiple rules according to only one rule. However, Fry does, see [0011], "In the process of finding the applicable template rule, more than one template rule can have a pattern that matches a given element. However, only one template rule can be applied". Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry's teachings would have allowed Prompt's et al. method and system to gain a simple application of a rules base to a hierarchical display because, e.g., "it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user", see Lamkin et al., U.S. 2004/0220926, paragraph [0163]).

12-13. (Canceled)

14. The computer system of claim 11 wherein the graphical interface includes a package list frame, an object list frame driven by the package list frame, and a detail frame driven by the object list frame, wherein the package list frame includes selectable applications of said computer applications and selectable associated table creators of tables relating to the technical data, wherein the object list frame is adapted to include selectable tables driven by a computer application and associated table creator selected from the package list frame, and wherein the detail frame is adapted to include table information relating to a table selected from the object list frame (See e.g. Prompt et al. Figs. 23A-B where, see [0195], "the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302 and a corresponding flat default view 2303 corresponding to a DN for the information displayed 2304 using the third module 1056").

15. The computer system of claim 11, wherein the information catalog comprises result files selected from the group consisting of Hypertext Markup Language (HTML) files, PDF files, ZIP files, and combinations thereof (See e.g. Prompt et al. Fig. 17 where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”).

16. The computer system of claim 11, wherein the first source comprises at least one eXtensible Markup Language (XML) file comprising the business metadata (See e.g. Prompt et al. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format”).

17. The computer system of claim 16, wherein the XML file includes well-formed HTML code (See e.g. Prompt et al. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format”).

18. (Canceled)

19. The computer system of claim 11, wherein the data warehouse is a relational database management system, and wherein the technical data is stored in tables of the relational database management system (See e.g. Prompt et al. Fig. 4 where, see [0132], “The embodiment of the system 100b also illustrates that the relational computing system 106b can be a relational database”).

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20. The computer system of claim 11, said method further comprising accessing additional technical data from the first source; and wherein said applying step comprises applying the presentation metadata to the technical metadata, the business metadata, and the additional technical metadata to generate the information catalog (See e.g. Prompt et al. [0232], “Not only does the security parameters enable the addition and modification of user and group information, but also the importing of information from an existing LDAP server” and Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”).

21. A computer program product, comprising a computer usable medium having a computer readable program code embodied therein, said computer readable program code comprising an algorithm adapted to implement a method for generating an information catalog relating to a business model, said method comprising the steps of:

accessing technical metadata from a data warehouse, said technical metadata being associated with data used by computer applications, said computer applications supporting business processes of the business model (See e.g. Fig. 4 where, see [0163], “the data source is a relational database 106b which forms the authoritative source of directory information to be viewed with the VDS 408”);

accessing business metadata from a first source outside of the data warehouse, said business metadata comprising relationships between the business processes and the computer applications, said business metadata further comprising relationships between the computer

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applications and the technical metadata (See e.g. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format. The fifth module 1064 maps the entities described by the module 1062 into the hierarchical object classes and attributes, which in one embodiment can be for LDAP”);

accessing presentation metadata from a second source outside of the data warehouse, said second source being independent of the first source, said presentation metadata specifying a presentation format of the technical metadata and business metadata, wherein the second source comprises at least one eXtensible Stylesheet Language (XSL) stylesheet comprising the presentation metadata (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure” and Fig. 17 where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”);

applying the presentation metadata to the technical metadata and the business metadata to generate the information catalog, said information catalog comprising the technical metadata and the business metadata in accordance with the presentation format specified by the presentation metadata (See e.g. Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a

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schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”); and

displaying, on an output device for an end user, a graphical interface representing the generated information catalog (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”),

wherein the method further comprises generating a rules base of rules as templates derived from the presentation metadata in the at least one XSL stylesheet (See e.g. [0232], “In addition to describing how to plan and map meaningful views with LDAP rules... with respect to the second module 1060” and [0261], “In doing so, the second module 1060 performs various sub-processes the functions of which include, but are not limited to: (1) defining and managing hierarchical paths and views derived from the ORG object... and (3) defining an HTML presentation template for run-time display of information on the client computer 402” where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”);

wherein prior to the applying step the method further comprises parsing the technical metadata and the business metadata and to form a source tree such that the source tree comprises the parsed business metadata and parsed technical metadata logically linked to each other (See e.g. [0085], “the present invention can operate with an information system that locates, extracts and transforms data from a variety of unrelated relational network data sources into a

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hierarchical network data model through the dynamic reconfiguration of the Directory Information Tree (DIT) and contents”);

wherein the applying step comprises both applying the templates of the rules base and traversing the source tree to form a result tree that includes the logically linked technical metadata and business metadata integrated with the presentation metadata (See e.g. Fig. 34A where, see [0252], “The Presentation tab 3410 includes the template for the information that will be published by the directory view” and Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”);

wherein the method further comprises transforming the result tree into the information catalog such that the information catalog comprises files formatted in accordance with the presentation metadata (See e.g. Fig. 23A where, see [0195], “Thereafter, referring to FIG. 23A, the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302”);

wherein traversing the source tree comprises traversing the entire source tree in accordance with a recursive descent algorithm in which said traversing comprises starting at the root node of the source tree and traversing through the source tree until a leaf node is reached and, then returning through the source tree to the root node (See e.g. [0014], “recursive inquiries are required to accommodate the disparate syntax and semantics used by various database providers. The recursive inquiries involve re-synchronizing information existing in unrelated

data sources on an ongoing basis due to the incompatibilities introduced by the disparate data models of each data source”);

wherein said traversing the source tree comprises ascertaining whether there is a rule in the rules base for each element in the source tree (Prompt et al. do not teach “ascertaining whether there is a rule in the rules base for each element in the source tree”. However, Fry does, see [0010], “A stylesheet contains a set of template rules, with each template rule having two parts. One part is a pattern that is matched against nodes in the source tree, and the other part is a template that can be instantiated to form part of the result tree”. Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry’s teachings would have allowed Prompt’s et al. method and system to gain a simple application of a rules base to a hierarchical display because, e.g., “it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user”, see Lamkin et al., U.S. 2004/0220926, paragraph [0163]);

wherein each element having exactly one rule in the rules base, as determined from said ascertaining, is written out in accordance with said exactly one rule during said displaying (Prompt et al. do not teach displaying elements with one rule according to that rule. However, Fry does, see [0011], “In the process of finding the applicable template rule, more than one template rule can have a pattern that matches a given element. However, only one template rule can be applied”. Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry’s teachings would have allowed Prompt’s et al. method and system to gain a simple application of a rules

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base to a hierarchical display because, e.g., “it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user”, see Lamkin et al., U.S. 2004/0220926, paragraph [0163]); and

wherein for each element having more than one rule in the rules base, as determined from said ascertaining, one or more of said more than one rule is applied to said each element in accordance with a rule hierarchical scheme for determining how said each element is displayed during said displaying (Prompt et al. do not teach displaying elements with multiple rules according to only one rule. However, Fry does, see [0011], “In the process of finding the applicable template rule, more than one template rule can have a pattern that matches a given element. However, only one template rule can be applied”. Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Fry’s teachings would have allowed Prompt’s et al. method and system to gain a simple application of a rules base to a hierarchical display because, e.g., “it does not make sense to show interactive content that requires a mouse when only a TV remote control is available to the user”, see Lamkin et al., U.S. 2004/0220926, paragraph [0163]).

22-23. (Canceled)

24. The computer program product of claim 21 wherein the graphical interface includes a package list frame, an object list frame driven by the package list frame, and a detail frame driven by the object list frame, wherein the package list frame includes selectable applications of said computer applications and selectable associated table creators of tables relating to the technical data, wherein the object list frame is adapted to include selectable tables driven by a computer application and associated table creator selected from the package list frame, and

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wherein the detail frame is adapted to include table information relating to a table selected from the object list frame (See e.g. Prompt et al. Figs. 23A-B where, see [0195], “the second module 1060 can be used to generate, by way of example, a user interface 2301 to display a DIT 2302 and a corresponding flat default view 2303 corresponding to a DN for the information displayed 2304 using the third module 1056”).

25. The computer program product of claim 21, wherein the information catalog comprises result files selected from the group consisting of Hypertext Markup Language (HTML) files, PDF files, ZIP files, and combinations thereof (See e.g. Prompt et al. Fig. 17 where, see [0142], “The memory unit 1718 preferably includes an Internet (web) browser application 1722 being of conventional type that provides access to the Internet and processes HTML, DHTML, XML, XSL, or other mark-up language to generate images on the display device 1704”).

26. The computer program product of claim 21, wherein the first source comprises at least one eXtensible Markup Language (XML) file comprising the business metadata (See e.g. Prompt et al. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format”).

27. The computer program product of claim 26, wherein the XML file includes well-formed HTML code (See e.g. Prompt et al. Fig. 10B where, see [0159], “The fourth module 1062 includes a program for mapping relational objects, such as tables, columns, attributes, and logical relationships into an external (e.g., XML) format”).

28. (Canceled)

29. The computer program product of claim 21, wherein the data warehouse is a relational database management system, and wherein the technical data is stored in tables of the relational database management system (See e.g. Prompt et al. Fig. 4 where, see [0132], “The embodiment of the system 100b also illustrates that the relational computing system 106b can be a relational database”).

30. The computer program product of claim 21, said method further comprising accessing additional technical data from the first source; and wherein said applying step comprises applying the presentation metadata to the technical metadata, the business metadata, and the additional technical metadata to generate the information catalog (See e.g. Prompt et al. [0232], “Not only does the security parameters enable the addition and modification of user and group information, but also the importing of information from an existing LDAP server” and Fig. 10B where, see [0159], “The second module 1060 is a program that includes processes for building virtual directory definitions using an oriented path derived from a schema for relational data sources, and represented by a hierarchical sub-directory of objects in a Directory Information Tree (DIT) structure”).

Response to Arguments

Applicant's arguments with respect to claims 1, 4-7, 9-11, 14-17, 19-21, 24-27, and 29-36 have been considered but are moot in view of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure: Ballantyne et al., U.S. 2001/0044811; Livingston et al., U.S. 6,424,979; George et al., U.S. 2003/0151633; Brayton et al., U.S. 2004/0205564; Bata et al., U.S. 6,901,403.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Aaron Sanders whose telephone number is 571-270-1016. The Examiner can normally be reached on M-Th 8:00a-5:00p.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AJS/
29 June 2007

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